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PART II

DEPARTMENT OF LABOR

Mine Safety and Health Administration

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MINE RESCUE TEAMS

[4510-43-M]

DEPARTMENT OF LABOR

Mine Safety and Health Administration

[30 CFR Part 49]

MINE RESCUE TEAMS

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Proposed rule.

SUMMARY: The Federal Mine Safety and Health Act of 1977 (Act), Section 115(e), requires the Secretary of Labor to publish proposed regulations which provide that mine rescue teams shall be available for rescue and recovery work to each underground coal or other mine in the event of an emergency. The Act provides that the costs of making advance arrangements for such teams shall be borne by the operator. The proposed rule requires the operator of each underground mine to have available at least two mine rescue teams and establishes the requirements for such teams. Interested persons may participate by submitting written comments, suggestions and objections to the address provided below.

DATES: Comments must be received on or before March 5, 1979.

ADDRESSES: Send comments to the Department of Labor, Mine Safety and Health Administration, Office of Standards, Regulations and Variances, Room 631, Ballston Tower No. 3, 4015 Wilson Boulevard, Arlington, Virginia 22203.

FOR FURTHER INFORMATION CONTACT:

Frank A. White, (703) 235-1910.

SUPPLEMENTARY INFORMATION:

I. Background

The Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, amended the Federal Coal Mine Health and Safety Act of 1969 (Coal Act), Pub. L. 91-173, and repealed the Metal and Nonmetallic Mine Safety Act, Pub. L. 89-577. The Federal Mine Safety and Health Act of 1977 (Act), Pub. L. 91-173 as amended by Pub. L. 95-164, applies to coal, metal and nonmetal mines.

Section 115(e) of the Act provides: "Within 180 days after the effective date of the Federal Mine Safety and Health Amendments Act of 1977, the Secretary shall publish proposed regulations which shall provide that mine rescue teams shall be available for rescue and recovery work to each underground coal or other mine in the event of an emergency. The costs of making advance arrangements for such teams shall be borne by the operator of each such mine."

In accordance with Executive Order 12044 concerning improvement of government regulations and Department of Labor proposed guidelines implementing the Executive Order (43 FR 22915), persons known to be interested were contacted and given an opportunity to submit informal comments on a draft of the proposed rule prior to its publication in the Federal Register. The comments received have been given full consideration. As a whole, the comments reflect a desire for flexibility in the proposed rule particularly with respect to the equipment and training requirements, and several of the comments raised questions which merit further consideration. The most significant comments received are referred to in the following discussion of the proposed rule, together with considerations which prompted the proposed requirements. However, pending the benefit of full public comment, no changes in the basic approach of the MSHA draft have been made in the proposed rule.

II. Discussion of Proposed Rule

Under the proposed rule, each operator of an underground mine would be required to have available for each mine at least two mine rescue teams composed of five members and two alternates, unless an alternate mine rescue plan is approved by the Mine Safety and Health Administration (MSHA) District Manager.

One of the informal comments submitted suggested that one rescue team for each mine would be sufficient while another commenter considered three rescue teams appropriate in some circumstances. The proposed rule has retained the requirement that each operator establish or secure the services of at least two mine rescue teams so that a backup rescue team will be available in the event additional rescue assistance is needed. For instance, under severe mine rescue conditions or in the event prolonged rescue and recovery operations are required, alternating mine rescue teams would be necessary. The immediate services of two mine rescue teams would also be needed in the event of a major mine disaster. The proposed requirement also recognizes that a mine rescue team may already be involved in rescue operations or other activities which would jeopardize timely response by the team. This risk is significantly reduced by the proposed requirement of two mine rescue teams. However, at this point in the rulemaking process, MSHA is not convinced, based upon its experience, that it is necessary to require the availability of three mine rescue teams at any mine.

Notwithstanding the increased effectiveness and reliability of mine rescue capability provided by the proposed two team requirement, MSHA recognizes that under some circumstances meeting the two team requirement would be impracticable. One of the comments received provided an example, indicating that within a 60 minute area around the mine there was not a sufficient number of qualified persons to establish two mine rescue teams. Under these and similar circumstances, the proposed rule would require that the operator submit a detailed alternate mine rescue plan to the District Manager for approval. As part of such alternate plan for ensuring mine rescue capability it would be necessary for the operator to state the reasons why mine rescue teams could not be made available in accordance with the proposed rule, together with the number of miners employed at the mine, the distance from the mine of established mine rescue teams and stations and the availability of State mine rescue teams.

Under the proposed rule, an alternative plan may only be considered if "the mine is small and in a remote location." Several comments suggested that the criteria should be expanded to include other conditions or situations which might merit the use of an alternative to the mine rescue team requirements of these proposed rules. MSHA will be considering the appropriateness of this suggestion during the rulemaking process and encourages comments in this regard.

To make mine rescue teams available to each underground mine, the proposed rule would require each operator to establish and equip its own rescue teams or to enter into a written contractual or cooperative agreement which ensures the availability of mine rescue teams, unless an alternate mine rescue plan is approved by the District Manager. In any event, each operator would be required to give the MSHA District Manager in the district where the mine is located written notice of how the operator is securing availability of mine rescue teams. Where applicable, the operator would be required to submit a copy of any contractual or cooperative agreement for the services of a mine rescue team.

Several comments received emphasized the tradition and importance of voluntary mine rescue and recovery work and questioned whether rescue team members could be required to respond to an emergency. Under the proposed rule, an operator electing to have mine rescue teams available by written contractual or cooperative agreement is required only to enter into a contract or cooperative agreement for the availability of such teams. The proposed rule would not bind mine rescue team members or alternates to respond. However, it is expected that if the lives of miners or

other persons were threatened, any mine rescue team available would respond without hesitation.

Proposed § 49.3 prescribes minimum equipment requirements for mine rescue teams. These equipment requirements are based on MSHA's experience in mine safety and rescue and include equipment commonly used by established mine rescue teams. MSHA considers the proposed requirements to be the minimum rescue equipment necessary for effective mine rescue teams. The proposed equipment requirements for each mine rescue team are breathing apparatus, permissible cap lamps, self rescuers, a portable stretcher and blanket, a first aid kit and a tool bag. The proposed rule would also establish minimum equipment requirements for mine rescue stations. The proposed rule would require mine rescue stations to be equipped with one oxygen pump, suitable for use with the type of breathing apparatus used by the rescue teams; a portable supply of air, oxygen or chemicals, as applicable to the breathing apparatus used; a supply of spare parts for such breathing apparatus; a portable communication system and one self-contained oxygen resuscitator. Each rescue station would also be required to be equipped with two gas detectors for each of five potentially hazardous gases identified in the regulation. This proposed requirement would be satisfied by two individual detectors for each of the five gases or two multifunction detectors able to detect each of the five gases. In addition, it is proposed that rescue stations be equipped with one methane detector able to measure methane in any concentration up to 100 percent and two oxygen indicators or flame safety lamps. The proposed rule would also require that readily available conventional ground transportation be maintained for mine rescue teams. The proposed rule would not preclude the use of other faster means of transportation when responding to an emergency, however, the required ground transportation must be maintained available.

The proposed mine rescue team equipment requirements are slightly changed from the draft of the proposed rule. No changes in the equipment proposed have been made. However, the comments received indicated that unnecessary duplication of equipment could result.

For the proposed rule to effectively ensure availability of mine rescue teams to all underground mines, it is necessary that each mine rescue team be independently able to respond to a mine emergency. To accomplish this purpose, it is proposed that each rescue team be provided its own breathing apparatus, cap lamps and other equipment essential to independent effective mine rescue and recovery work. However, the ability to independently respond to an emergency is not contingent upon each mine rescue team being provided, for example, its own oxygen pump, or spare breathing apparatus parts or other equipment and accessories which reasonably may be shared between two rescue teams at a single mine rescue station. Accordingly, under the proposed rule each mine rescue team would be provided certain essential rescue equipment, while other equipment and accessories would be required to be available to rescue teams at the mine rescue station. Equipment and accessories shared between rescue teams must also be made available to both teams for training.

Commenters also asked whether mine rescue teams could be maintained and trained by the operator in accordance with the draft proposal, but equipment for such teams be provided by contractual arrangement with a mine rescue station. The proposed rule is intended to be sufficiently flexible to meet varying needs and would not prohibit such a method of providing rescue teams with the necessary equipment, so long as the availability of the rescue teams would not be hindered. Another comment addressing rescue team equipment questioned whether the proposed rule made allowance for use of improved and new equipment. The proposed rule only establishes the minimum equipment to be provided rescue teams. Improved equipment and alternate new equipment is anticipated and accounted for in the proposed rule.

The proposed rule would also govern the maintenance of mine rescue equipment. Proposed § 49.4 would require inspection and testing of breathing apparatus at intervals not exceeding 30 days by a person trained in the use and care of the breathing apparatus in accordance with manufacturer's recommendations to ensure reliability. A record of such inspections would be required to be maintained at the mine rescue station for a period of two years.

Under the proposed rule, mine rescue team members and alternates would be required to meet minimum experience, physical and training requirements. MSHA considers the proposed requirements to be essential for the protection of mine rescue team members, alternates and miners during rescue and recovery work.

To be eligible to serve on a mine rescue team, a total of one year or more underground mining experience within the preceding three years would be required. Miners stationed on the surface, but whose duties have required regular underground work would be considered employed in an underground mine.

The proposed physical requirements would be met by each team member and alternate annually passing a physical examination and obtaining the examining physician's certification that the member or alternate is in excellent physical condition and fit to perform mine rescue and recovery work for extended periods under strenuous conditions, including use of a self-contained oxygen breathing mine rescue apparatus. It is proposed that MSHA provide a physician's examination form to be completed by the examining physician and that a record of such completed form be maintained for at least two years at the mine rescue station.

The proposed physician's examination form would require the examining physician to conduct a careful review of medical history, rigorous physical examination and prescribed laboratory tests. The proposed laboratory test requirements would include a complete blood count, urinalysis, EKG and spirometry which provides forced vital capacity, 1 second forced expiratory volume and the maximum voluntary ventilation.

The proposed rule also identifies certain physical conditions which would disqualify a candidate from mine rescue team service. The conditions identified are those which could make mine rescue and recovery work unduly dangerous for the individual to undertake and could expose others to added risk under emergency conditions.

The proposed minumum standards for visual acuity and hearing would each be required to be met without the assistance of glasses or contact lenses, or a hearing aid. In addition, MSHA is considering whether the use of these devices by rescue team members and alternates presents potential hazards and should therefore be prohibited during rescue and recovery operations.

At this time, MSHA believes that wearing glasses together with approved breathing apparatus does not present a hazard. However, there is evidence that contact lenses may become lodged above the eye due to pressure in the facepiece of approved breathing apparatus. This could be harmful to the wearer and also pose a hazard to other persons under emergency conditions. Hearing aids may also present potential hazards. Hearing aids are battery operated and may therefore be dangerous in certain atmospheres. A hearing aid may also be dislodged under emergency conditions, creating hazards for the wearer and others. MSHA is soliciting comments concerning potential hazards with the use of glasses, contact lenses and hear-

ing aids by rescue team members and alternates.

Prior to serving on a mine rescue team, each rescue team member and alternate would also be required by the proposed rule to complete several courses of training approved by the Office of Education and Training, MSHA. The proposed training requirements include a 20-hour initial course of instruction in the use, care and maintenance of the type of breathing apparatus to be used by the rescue team. If auxiliary breathing equipment is provided, an additional 10-hour course of instruction in the use, care and capabilities of the auxiliary equipment would be required. If the type of breathing apparatus is changed, an additional four hours of training with the different breathing apparatus would be required. Upon completion of initial training, each team member and alternate would be required to complete a 20-hour course of instruction in advanced mine rescue procedures. It is also proposed that each team member and alternate receive basic training approved by the Office of Education and Training, MSHA, in first aid and cardiopulmonary resuscitation, complemented by approved annual refresher courses. In addition, each team member and alternate would be required to be trained and completely familiar with the ventilation, escape routes and refuge chambers of each mine served by the rescue team.

Commenters raised questions concerning the amount and type of instruction required under the proposed rule. The proposed requirements reflect the importance of complete knowledge of mine rescue equipment and procedures under emergency conditions. In view of the hazardous and diverse nature of mine rescue and recovery work, no changes in the amount of instruction have been made in the proposed rule. Although it may be possible to permit a more flexible approach, the comments on the draft proposal do not provide a sufficient basis for making a change in the proposed rule and additional comments and data are solicited.

Commenters also questioned the need for training in cardiopulmonary resuscitation (CPR). Basic knowledge of CPR together with training in first aid are required under the proposed rule so that mine rescue team members and alternates are prepared to respond to the unforeseeable as well as foreseeable circumstances which may arise under emergency mine rescue conditions. Although CPR techniques must be administered quickly after the need arises, and under some circumstances may even be dangerous to administer, MSHA believes it would be a distinct advantage if mine rescue team members had the ability to render this life-saving assistance.

Together with training through courses of instruction, the proposed rule would require rescue team members and alternates to receive practical training with the rescue equipment to be used by the team at least four hours each month or eight hours bimonthly. All team members and alternates would be required to annually complete at least 40 hours of such training to remain eligible to serve on the rescue team. Under the proposed rule, the required training sessions would include wearing and use of the breathing apparatus provided the rescue team for at least two hours bimonthly while under oxygen and training in the use of auxiliary equipment, if provided. The required practical training sessions would be held underground at least once each four months and the location of such sessions rotated among the mines served by the team.

Several commenters suggested that fewer practical training sessions by mine rescue teams would be adequate. The proposed monthly or bimonthly training session requirement is based on MSHA's experience in mine rescue and recovery work and reflect MSHA's experience that failure of mine rescue teams in the past most often has been due to insufficient training with rescue equipment and in rescue and recovery procedures. Accordingly, monthly or bimonthly training sessions are retained as a proposed requirement of mine rescue teams.

The proposed rule would also require MSHA approval of instructors to teach the proposed training course requirements to ensure uniform competency and procedures in mine rescue and recovery operations. Instructors would be approved by the MSHA Office of Education and Training. The proposed rule does not contain experience requirements for instructors, however MSHA is soliciting comments regarding whether previous mining or mine rescue experience should be part of instructor approval. An instructor's approval could be revoked by the MSHA Training Center Chief for good cause, which under the proposed rule may include not teaching a training course at least once every 24 months. The proposed rule would provide appeal procedures for approval revocation.

Under the proposed rule, the person in charge of each mine rescue team would be required to notify the Training Center Chief in the area where the mine rescue station is located of the training sessions scheduled, including the location, times and length of each session. In addition, a record of all practical training sessions and training courses completed by each team member and alternate would be required to be maintained at the mine rescue station for a period of two years.

The proposed rule would also establish basic requirements for mine rescue stations. It is proposed that mine rescue stations be adequate in size to conduct classes, unless other classrooms are readily available, and that the stations be provided with hot and cold running water, illumination, heat and a commercial telephone. It is also proposed that mine rescue stations be located no greater than 60 minutes travel time by conventional ground transportation from the mine or mines served. Greater distances, however, may be approved by the District Manager where mines are remotely located.

To ensure prompt response by mine rescue teams in the event of an emergency, the proposed rule would also require each mine to have a mine rescue notification plan. Such notification plan would be on a form supplied by MSHA and would outline procedures to be followed in notifying the mine rescue team when their services were required. It is proposed that a copy of the mine rescue notification plan and, where applicable, a copy of the written cooperative or contractual agreement for rescue team services be posted at the mine rescue station and the office of the mine served by the rescue team.

The proposed rule would also require a mine map of each mine served by a rescue team be posted at the mine rescue station. This proposed requirement is intended to assist mine rescue teams in being familiar with the ventilation, escape routes and refuge chambers of mines served. To adequately serve this purpose without imposing undue burden upon the operator, it is proposed that mine maps provided to mine rescue stations be updated no less than every six months, or whenever significant changes are made affecting ventilation, escape routes or refuge chambers.

Under the proposed rule each operator would also be required to provide representatives of miners information concerning mine rescue teams. MSHA believes the operator's method of ensuring availability of mine rescue teams is of great interest and concern to miners. In addition, the proposed requirement is responsive to Congress' clear intention to engender greater miner involvement in achieving purposes of the Act.

In addition to comments concerning specific proposed requirements, one commenter raised the issue of whether independent construction contractors would be required to comply with the proposed rule. This question arises from the definition of "operator" in

Section 3(d) of the Act. The Act defines the operator of a mine as "any owner, lessee, or other person who operates, controls, or supervises a coal or other mine or any independent contractor performing services or construction at such mine."

The effectiveness of the proposed rule is premised upon continuous availability of mine rescue team services to each underground coal or other mine. To achieve the necessary continuity in availability of mine rescue teams, the "operator" who is an owner, lessee, or other person who operates, controls, or supervises a coal or other mine would be held responsible for compliance with the proposed rule. An "operator" meeting this definition is in the best position to provide and maintain continuously available mine rescue capability. If independent contractors were required to provide for availability of mine rescue teams while performing contruction or services at a mine, it would be necessary to shift responsibility for maintaining the availability of rescue teams. After an independent contractor completed its work at a mine site, responsibility for maintaining availability of mine rescue teams would have to shift to the operator who is the owner, lessee, or other person who operates, controls or supervises the mine. Such shifting of responsibility would unnecessarily jeopardize continuous mine rescue capability. Therefore, compliance with the proposed rule would be the responsibility of the "operator" who is an owner, lessee, or other person who operates, controls or supervises a coal or other mine.

III. Executive Order 12044

After review of available information, it has been determined that this document does not contain a major proposal requiring the preparation of a regulatory analysis under Executive Order 12044 and the Department of Labor's proposed guidelines for implementing the Executive Order (43 FR 22915, May 26, 1978). Based upon a projected need for approximately 800 new mine rescue teams and 350 new mine rescue stations in the coal mining industry and 90 new teams and 50 new stations in the metal and nonmetal mining industries, at a cost of approximately 33 thousand dollars per team and 39 thousand dollars per station, the total first year cost of this proposed rule would be approximately 45 million dollars.

Drafting Information

The principal persons responsible for preparation of this proposed rule are: John S. Curtis, Education and Training, Mine Safety and Health Administration and Edward C. Hugler, Attorney Advisor, Division of Mine Safety and Health, Office of the Solicitor, Department of Labor.

Dated: December 27, 1978.

Robert B. Lagather,
Assistant Secretary for Mine Safety and Health.

1. It is proposed to add a new part 49 to Subchapter H, Chapter I, Title 30, Code of Federal Regulations as set forth below:

PART 49—MINE RESCUE TEAMS

Sec.

49.1 Scope and purpose.
49.2 Availability of mine rescue teams.
49.3 Equipment for mine rescue teams and stations.
49.4 Maintenance of mine rescue apparatus and equipment.
49.5 Physical requirements for team members and alternates.
49.6 Requirements for team members and alternates.
49.7 Requirements for training of mine rescue teams; instructors; records of training.
49.8 Mine rescue station.
49.9 Mine emergency notification plan and mine map.
49.10 Representatives of miners.

Authority: The provisions of this Part 49 are issued pursuant to Sections 101, 103(h), 115(e) and 508 of the Federal Mine Safety and Health Act of 1977 (Pub. L. 91-173, as amended by Pub. L. 95-164).

§ 49.1 Scope and purpose.

This Part 49 implements the requirements of Section 115(e) of the Federal Mine Safety and Health Act of 1977 under which each operator of an underground coal or other mine shall provide for mine rescue teams to be available for rescue and recovery work at each such mine in the event of an emergency. This Part 49 applies to each operator of an underground coal or other mine.

§ 49.2 Availability of mine rescue teams.

(a) Within 6 months after the effective date, or prior to the opening of a new mine thereafter, the operator of each underground mine shall have at least two mine rescue teams available for rescue and recovery work. Except as provided in paragraph (b)(3) of this section, each mine rescue team shall consist of at least five members and two alternates, who shall be trained and qualified in accordance with the provisions of §§ 49.5, 49.6, and 49.7 of this part, and equipped in accordance with the provisions of § 49.3 of this part.

(b) The operator of an underground mine shall provide for the availability of mine rescue teams by:

(1) Establishing and equipping mine rescue teams which are available at all times when miners are underground; or

(2) Entering into a written contractual or cooperative agreement which insures the availability of mine rescue teams at all times when miners are underground; or

(3) Establishing an alternate mine rescue plan approved by the District Manager, if the mine is small and in a remote location. Such alternate plan shall be submitted to the District Manager in the district where the mine is located and state:

(i) The number of miners employed at the mine,

(ii) The distances from an established mine rescue team and station,

(iii) The availability of State mine rescue teams and stations,

(iv) The reasons why rescue teams which fully meet the requirements of paragraph (a) of this section cannot be made available,

(v) The operator's alternate method for enduring that mine rescue capability is provided at all times when miners are underground.

(c) The District Manager for the district where the mine is located shall be notified in writing by the operator as to how the requirements of paragraph (a) of this section will be met. The operator shall also provide the District Manager a copy of any contractual or cooperative agreement for the services of mine rescue teams.

§ 49.3 Equipment for mine rescue teams and stations.

(a) Each mine rescue team shall be provided with at least the following apparatus, equipment, and accessories which shall be stored in a mine rescue station:

(1) At least six self-contained oxygen breathing apparatus with a minimum of 2 hours capacity each, approved under Subpart H of Part 11 of this title, and the necessary equipment for testing such breathing apparatus;

(2) One extra oxygen bottle for each self-contained compressed oxygen breathing apparatus;

(3) Seven approved self-rescuers available for team members;

(4) Seven permissible cap lamps and charging rack;

(5) One portable stretcher;

(6) One blanket;

(7) One emergency first aid kit; and

(8) One tool bag containing:

(i) one brass hammer and brass nails if the rescue team is intended to render service to mines with explosive or potentially explosive atmospheres, or

(ii) one hammer and nails for nonexplosive atmospheres, and

(iii) accessories necessary for taking notes and marking locations underground.

(b) Each mine rescue station shall be equipped with at least the following apparatus, equipment and accessories:

(1) Two gas detectors for:

(i) Methane (CH_4) in concentrations of 0–5 percent or 0–10 percent,
(ii) Hydrogen sulfide (H_2S),
(iii) Carbon monoxide (CO),
(iv) Carbon dioxide (CO_2), and
(v) Oxides of nitrogen (NO);
(2) One methane (CH_4) detector—100 percent;
(3) Two oxygen indicators or two flame safety lamps;
(4) One oxygen pump, suitable to the type of breathing apparatus used by the rescue teams;
(5) A portable supply of liquid air, liquid oxygen, pressurized oxygen, or chemicals, as applicable to the breathing apparatus used by the mine rescue team(s), sufficient to sustain each team for 6 hours while using the breathing apparatus during rescue operations;
(6) A supply of spare parts for repairing the breathing apparatus used by the rescue team(s);
(7) One portable mine rescue communications systems, approved under Part 23 of this title, with spare parts, or a sound-powered communication system, with spare parts. The wires or cable to the communication system shall be of sufficient tensile strength so that the wires or cable may be used as a manual communication system. These communication systems shall be at least 1,000 feet in length;
(8) One self-contained oxygen resuscitator.

(c) Each operator shall establish, in advance, transportation for rescue teams and equipment by conventional ground transportation from the rescue station to the mine or mines serviced. Faster means of transportation may be used in the event of an emergency.

§ 49.4 Maintenance of mine rescue apparatus and equipment.

Mine rescue apparatus and equipment shall be stored and maintained in a manner that will insure readiness for immediate use. Breathing apparatus shall be inspected and tested, and where applicable, cylinder pressure maintained, by a person trained in the use and care of breathing apparatus in accordance with manufacturer's recommendations at intervals not exceeding 30 days. A record of inspections and tests, initialed by the person making the inspections and tests, shall be maintained at the mine rescue station for a period of two years.

§ 49.5 Physical requirements for team members and alternates.

(a) Each member of a mine rescue team and alternates shall annually be examined by a physician who shall certify that each member and alternate is physically fit to perform mine rescue and recovery work for prolonged periods under strenuous conditions, including use of a self-contained oxygen breathing apparatus. The first such physical examination shall be completed within 30 days prior to scheduled initial training.

(b) The operator shall have MSHA Form 5000-3 filled out and signed by a physician for each member of a mine rescue team and alternates. Such forms shall be kept on file at the mine rescue station for a period of two years.

(c) The following conditions shall disqualify a miner from mine rescue team service:
(1) Seizure disorder;
(2) Perforated eardrum;
(3) Hearing loss without a hearing aid greater than 40 decibels at 500, 1,000 and 2,000 Hz, using the ISO or ANSI scale;
(4) Repeated blood pressure (controlled or uncontrolled by medication) reading which exceeds 160 systolic, or 100 diastolic, or which is less than 105 systolic, or 60 diastolic;
(5) Distant visual acuity without glasses less than 20/50, snellen, in one eye and 20/70 in the other;
(6) Heart disease;
(7) Hernia;
(8) Major back surgery within the preceding year;
(9) Absence of a limb or hand.
(10) Any other condition which the examining physician determines renders the miner physically unfit for rescue team service.

§ 49.6 Requirements for team members and alternates.

Each member of a mine rescue team and alternates shall have been employed in an underground mine for a total of one year or more within the three preceding years prior to becoming a team member. Miners whose duties have required regular underground work prior to becoming a team member, even though they are stationed on the surface, shall be considered employed in an underground mine.

§ 49.7 Requirements for training of mine rescue teams; instructors; records of training.

(a) Each member of a mine rescue team and alternates shall complete a 20-hour initial course of instruction, as prescribed by the Office of Education and Training, MSHA, in the use, care, and maintenance of the type of breathing apparatus that will be utilized by the mine rescue team.

(b) Each member of a mine rescue team shall complete a 10-hour course of instruction, as prescribed by the Office of Education and Training, MSHA, in the use, care, capabilities and limitations of auxiliary mine rescue equipment where such teams are provided with auxiliary equipment.

(c) Each member of a mine rescue team and alternates shall complete a 20-hour course of instruction, as prescribed by the Office of Education and Training, MSHA, in advanced mine rescue procedures upon completion of the initial training.

(d) If the type of breathing apparatus is changed, the mine rescue team members and alternates shall have, as soon as is practicable, an additional 4 hours of training using the different breathing apparatus after the change is made.

(e) Each member of a mine rescue team and alternates shall receive first aid training and training in cardiopulmonary resuscitation which are approved by the Office of Education and Training, MSHA.

(f) Each member of a mine rescue team and alternates shall have current mine map training and be completely familiar with the mine ventilation, escape routes, and refuge chambers for each mine served by the rescue team.

(g) Prior to serving on a mine resuce team, each person shall have completed the training as prescribed in paragraphs (a), (b), (c), (d), (e) and (f) of this section.

(h) Thereafter, each member of a mine rescue team and alternates shall annually complete refresher training courses in first aid and cardiopulmonary resuscitation which are approved by the Office of Education and Training, MSHA.

(i) Each mine rescue team and alternates shall train at least 4 hours each month or 8 hours bimonthly. Training shall include the wearing and use of the breathing apparatus by the team members and alternates for a period of at least 2 hours while under oxygen bimonthly. A team member or alternate will be ineligible to serve on a team if more than 8 hours of training is missed during one year, unless additional training is received to make up for the time over 8 hours of training missed. All team members and alternates shall receive at leat 40 hours of trailing a year.

(j) Each mine rescue team shall train in the use of auxiliary mine rescue equipment where such equipment is provided. Training shall include the wearing and use of auxiliary breathing apparatus for a perod of at least two hours every six months. This training will be a part of the 40 hours of training as required each year by paragraph (i) of this section.

(k) The required training session shall be held underground at least once each 4 months, and the location of such underground training shall be rotated among the mines served by the teams.

(l) The training courses required by this section shall be conducted by in-

structors who have been approved by MSHA in any of the following ways:

(1) Instructors may satisfactorily complete a program of instruction approved by the office of Education and Training, MSHA, in the subject matter to be taught and either:

(i) take the instructor's training course conducted by the Office of Education and Training, MSHA, or

(ii) be designated by the Office of Education and Training, MSHA, to give such instruction;

(2) Instructors may be designated by the Office of Education and Training, MSHA, as approved instructors to teach specific courses based on their qualifications and teaching experience;

(3) Cooperative instructors who have been designated by the Office of Education and Training, MSHA, to teach MSHA-approved courses prior to the effective date of this part and who have taught such courses within the 24 months prior to the effective date of this part shall be considered approved instructors for such courses.

(m) The Chief of the Training Center may revoke an instructor's approval for good cause, which may include not teaching a course at least once every 24 months. A written statement revoking the approval together with reasons for revocation shall be provided the instructor. The affected instructor may appeal the decision of the Training Center Chief by writing to the Director of Education and Training, MSHA, 4015 Wilson Boulevard, Arlington, Va. 22203, within 30 days of notification of the Training Center Chief's decision. The Director of Education and Training shall render a decision on the appeal within 30 days after receipt of the appeal.

(n) The person who is in charge of the mine rescue team shall notify the Chief of the Training Center in the area where the mine rescue station is located of the schedule of training sessions which shall include the locations, times, and length of each session.

(o) A record of training of each team member and alternate as required in paragraphs (a), (b), (c), (d), (e), (f), (h), (i), (j), (k) and (l) of this section shall be on file at the mine rescue station for a period of two years.

§ 49.8 Mine rescue station.

(a) A mine rescue station, designated by a conspicuous sign, shall be adequate in size to conduct classes, unless other classroom facilities are readily available, and shall be provided with hot and cold running water, illumination, heating devices and a commercial telephone.

(b) Mine rescue stations shall be located no more than 60 minutes travel time by conventional ground transportation from the mine or mines to be served. In areas where mines are remotely located, greater distances may be approved by the District Manager based on information received under paragraph (b)(3) of § 49.2

(c) Mine rescue stations at mine sites shall be located on the surface and offset from any mine openings so as to protect the rescue station from forces coming out of the mine should an explosion occur.

(d) Authorized representatives of the Secretary shall have the right of entry to inspect any designated mine rescue station.

§ 49.9 Mine emergency notification plan and mine map.

(a) Each mine shall have a mine rescue notification plan outlining the procedures to follow in notifying the mine rescue team when there is an emergency that requires their services.

(b) A copy of the mine rescue notification plan and any cooperative or contractual agreement for the services of mine rescue teams shall be posted in the mine rescue station and in the mine office of the mine served by the rescue teams.

(c) The mine rescue notification plan shall be on a form supplied by MSHA.

(d) A copy of a current map of each mine served by the mine rescue station, updated no less than every six months or whenever significant changes are made such as changes affecting ventilation, escape routes or refuge chambers, shall be posted in the mine rescue station.

§ 49.10 Representatives of miners.

Each operator shall provide representatives of miners designated in accordance with Part 40 of this title a copy of (a) any notice submitted to the District Manager in accordance with § 49.2(c) of this Part regarding how the operator is ensuring mine rescue teams are available to the mine; (b) any cooperative or contractual agreement for the services of mine rescue teams; and (c) the current mine rescue notification plan.

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